

## PROCESS FOR DISPLAYING PERSONAL INFORMATION IN A BROADCAST OF INTERACTIVE TELEVISION

[0001] The present invention relates to the area of interactive television.

[0002] The present invention relates more particularly to a process for displaying personal information in a broadcast of interactive television. The process in accordance with the invention advantageously applies to personal information in the form of short SMS messages.

[0003] The prior art already knows, from European patent EP 1, 188, 314 (Siemens), a process and a system of communication for displaying short messages on TV screens. According to the invention described in this document, short messages are sent by mobile terminals of a mobile phone system to a TV broadcasting unit identified by a corresponding telephone number. In this unit the short messages are converted into TV broadcasting signals and introduced into the television network in such a manner that they can be displayed on the TV sets linked to the television network.

[0004] The present invention has the problem of rectifying the disadvantages of the prior art by proposing a process that permits on the one hand the using of an interactive television decoder and on the other hand the superposing of personal information and a television broadcast.

[0005] To this end the present invention concerns in its most general meaning a process for displaying personal information in an interactive television broadcast comprising:

- A stage for the acquisition of the personal information with the aid of personal equipment,
- A stage for the transmission of this personal information to a server for the broadcasting of content,

- A stage for the processing of information coming from the server for the broadcasting of content consisting in putting it in a format intended to be used by the application software of the interactive television and in encapsulating this data in a format for the transportation of video stream,

Characterized in that this encapsulated data is broadcasted in multiplexing with the video streams corresponding to the televised broadcast associated with this personal information, and in that it also comprises a stage that can be actuated by the user for the simultaneous displaying and removal of video information and of this personal information.

[0006] The transport format of the personal information is preferably the MPEG format.

[0007] According to a first embodiment the personal information is short SMS messages.

[0008] According to a second embodiment the personal information is multimedia MMS messages.

[0009] According to a variant the personal information is digital images.

[0010] According to a variant the personal information is acquired on a portable phone and transmitted to the server of a telecommunication operator.

[0011] According to another variant the personal information is acquired on a personal computer.

[0012] The information processing stage advantageously comprises an operation for the aggregation of this personal information consisting in constructing at least one queue constituted by a plurality of messages.

[0013] According to a particular embodiment the information processing stage comprises an operation for the aggregation of this personal information consisting in constructing a plurality of queues.

[0014] Furthermore, the process advantageously comprises a stage for the filtering of personal information encapsulated as a function of parameters recorded on the user equipment.

[0015] The personal information advantageously contains a header comprising personalizing data of the filtering stage of the equipment of a TV viewer or of a group of TV viewers.

[0016] According to a variant the process also comprises a stage for the displaying of information of an advertising nature.

[0017] According to an embodiment this information of an advertising nature is of the text type.

[0018] This information of an advertising nature preferably comes from graphic files.

[0019] According to a particular embodiment these graphic files are in the JPEG, GIF, PNG or BMP format.

[0020] According to a particular embodiment the process comprises a stage for the construction of multiple streams from bits of personal information, each comprising a part of the personal information, before the information processing stage.

[0021] The different streams preferably allow a broadcasting into different chat rooms.

[0022] The present invention also relates to a system for implementing the process comprising at least means for the acquisition of this personal information, transmission means and display means.

[0023] The invention will be better understood with the aid of the following description, given solely by way of explanation, of an embodiment of the invention making reference to the attached figure.

[0024] Figure 1 shows an embodiment of the process in accordance with the invention.

[0025] In the embodiment shown in figure 1 the personal information is in the form of SMS and the content broadcasting server is an SMS server.

[0026] A television broadcast is produced in the form of video stream and is transmitted to the television broadcasting network.

[0027] The short message (SMS) issued from the personal equipment is transmitted to the SMS server, e.g., via a mobile telephony network, then to a server called the “processing server”.

[0028] The processing server receives the messages, authorizes their consultation or their suppression before transfer and stores them in a queue for a parameterable period.

[0029] The processing server places the short messages in a format for being exploited by the interactive television application software and encapsulates this data in a format for the transport of video stream.

[0030] The following stage consists in associating within the television broadcasting network the digital data in the form of video stream corresponding to the short messages with the digital data in the form of digital stream corresponding to the television broadcast. These two data types are then multiplexed and transmitted via the television broadcasting network to a decoder installed with a private party.

[0031] The decoder performs a demultiplexing operation on the video streams received and during the actuation that can be actuated by a TV viewer it commands the TV screen to display the content of the message and the television broadcast simultaneously.

[0032] According to a particular embodiment this processing server implements a stage for the aggregation of several messages.

[0033] The invention was described above by way of example. It is understood that an expert in the art is capable of realizing different variants of the invention without departing from the scope of the patent.